Owner's Booklet

FreeStyle FLASH™

Blood Glucose Monitoring System

Downloaded from www.Manualslib.com manuals search engine

Table of Contents

Important Information About Your
FreeStyle Flash™ Blood Glucose Monitoring System 2
Important Health Related Information 3-4

The FreeStyle Flash™ Meter and FreeStyle Test Strip

Getting Started With the FreeStyle Flash Meter 5-6
The FreeStyle Flash Meter and How It Works..... 7-8
The FreeStyle Flash Meter Display 9-12
The FreeStyle Test Strip..... 13-14

The FreeStyle Control Solution

All About FreeStyle Control Solution..... 15-18
Performing a Control Solution Test..... 19-20

The FreeStyle Lancing Device

FreeStyle Lancing Device 21
Using the Lancing Device 22-23
Lancing on Alternate Sites..... 24
Lancing your Finger 25
Removing the Lancet 26

Testing Your Blood Glucose

Blood Glucose Testing and Components..... 27-28
Performing a Blood Glucose Test 29-32
LO and HI Readings..... 33-34

Downloaded from www.Manualslib.com manuals search engine

Appendices

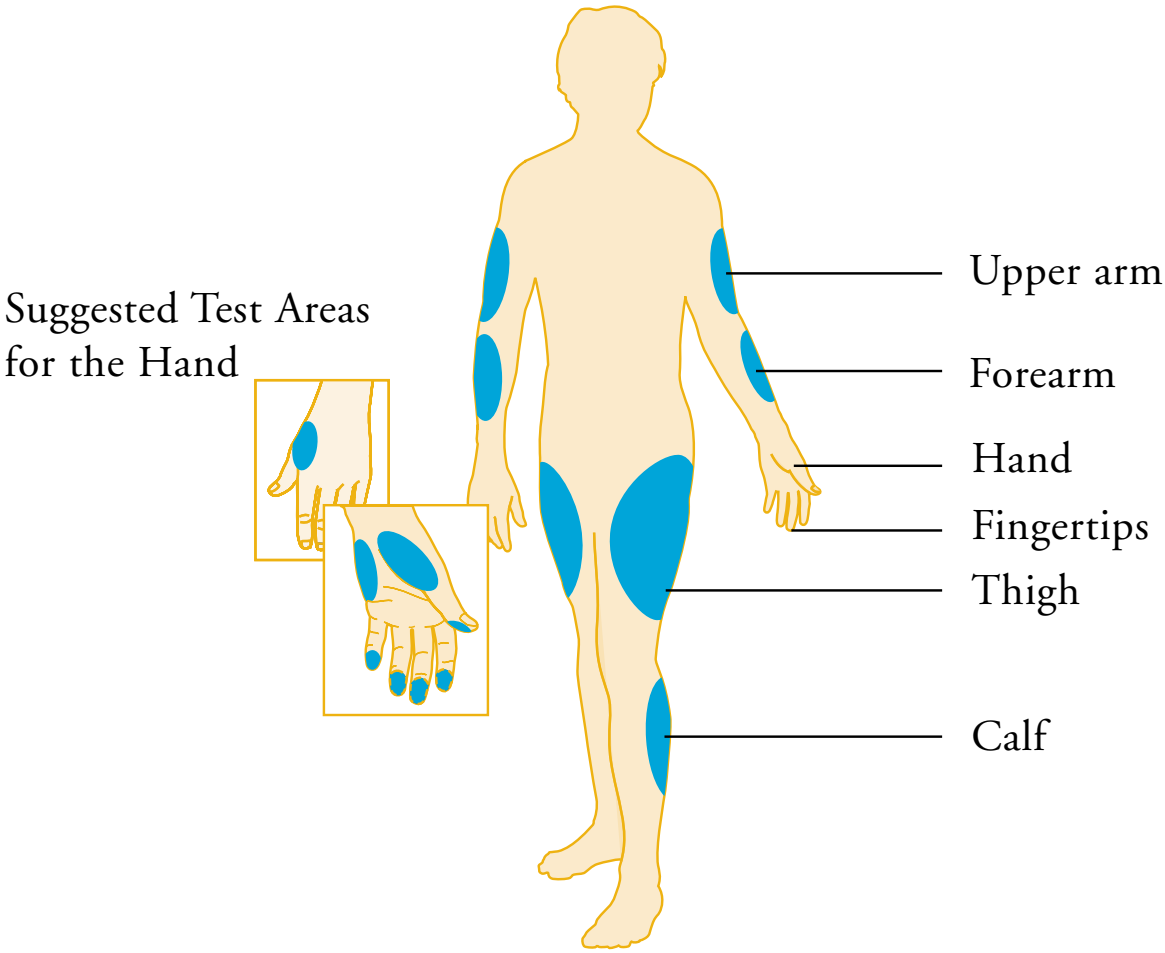
Using your Meter's Lights 35
Using Alarms 36
Meter Screen Displays 37-42
Setting Alarms 38
Viewing Your Meter Memory 43-45
Transferring Data 45
Error Messages 46-49
Batteries 50
Replacing the Batteries 51
Troubleshooting 53-54
Caring for Your Meter 55
Meter Specifications 56

Index 57-64
Target Range Guideline 65
Meter Serial Number 65
Important Phone Numbers 65

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle Flash™ System Uses the World's Smallest Sample So You Can Test on a Variety of Locations

Test On or Off Your Fingers



The FreeStyle Flash System gives you the freedom to obtain a blood sample for testing your glucose level from different areas of your body. You may test your blood glucose from your forearm, upper arm, hand, thigh, calf as well as your fingers. The human figure above shows the areas where you can test with the FreeStyle Flash System. Avoid moles, veins, bones and tendons.

WARNING: We recommend that you test on your fingers or palm (at the base of the thumb) if you are testing for hypoglycemia (low blood glucose) or if you suffer from hypoglycemia unawareness.

Downloaded from www.Manualslib.com manuals search engine

Important Information About Your FreeStyle Flash™ Blood Glucose Monitoring System

How the FreeStyle Flash System Should Be Used

- The FreeStyle Flash System is intended for use outside the body (in other words, *in vitro* diagnostic use only).
- The FreeStyle Flash System is used for measuring blood glucose (also known as *blood sugar*) from samples taken from the forearm, upper arm, hand, thigh, calf as well as your fingers (refer to page 1 for more information).
- The FreeStyle Flash Meter should only be used with FreeStyle® Test Strips and FreeStyle Control Solution. Using other brands of test strips and control solutions with the FreeStyle Flash Meter can produce inaccurate results.

Do use the FreeStyle Flash System for:

- Testing blood glucose.
- Testing only with fresh capillary whole blood samples.

Do not use the FreeStyle Flash System for:

- The diagnosis of diabetes.
- Testing on newborns.
- Testing of arterial blood.

WARNING: Keep the FreeStyle Flash System away from young children as it contains small parts that may be dangerous if swallowed.

Caution: Please read all the instructions provided in this *Owner's Booklet* and practice the testing procedures before using the FreeStyle Flash System. Blood glucose monitoring should be done with the guidance of a healthcare professional.

Downloaded from www.Manualslib.com manuals search engine

Important Health-Related Information

- Severe dehydration and excessive water loss may cause false low results. If you believe you are suffering from severe dehydration, consult your physician immediately.
- Test results below 60 mg/dL (3.3 mmol/L) mean low blood glucose (hypoglycemia).
- Test results greater than 240 mg/dL (13.3 mmol/L) mean high blood glucose (hyperglycemia).
- If you get results below 60 mg/dL or above 240 mg/dL, and do not have symptoms of hypoglycemia or hyperglycemia (refer to pages 33 and 34), repeat the test. If you have symptoms or continue to get results that fall below 60 mg/dL or above 240 mg/dL, follow the treatment advice of your healthcare professional.
- If you are experiencing symptoms that are not consistent with your blood glucose test *and* you have followed all instructions described in the *FreeStyle Flash™ Owner's Booklet*, call your healthcare professional.
- Physiologic differences in the circulation between the finger or palm (at the base of the thumb) and other test sites like the forearm, upper arm, hand, thigh, and calf may result in differences in blood glucose measurements from these test sites and your finger or palm (at the base of the thumb). Differences in blood glucose measurements between the other test sites and your finger or palm (at the base of the thumb) may be observed after eating, insulin medication, or exercise.

Downloaded from www.Manualslib.com manuals search engine

Important Health-Related Information *(continued)*

• Changes in blood glucose may be observed in finger or palm (at the base of the thumb) blood samples sooner than blood samples from the forearm and other alternate sites. Vigorous rubbing of the alternate test sites before lancing helps to minimize the difference between finger or palm (at the base of the thumb) and alternate site test results.

WARNING: We recommend that you test on your fingers or palm (at the base of the thumb) if you are testing for hypoglycemia (low blood glucose), or if you suffer from hypoglycemia unawareness.

Key Features of the FreeStyle Flash™ Blood Glucose Monitoring System

- World's smallest meter
- Fast, accurate results in an average of 7 seconds
- Virtually painless testing*
- World's smallest sample (3⁄10 microliter)
- Most test sites (test on your forearm, upper arm, hand, thigh, calf, or fingers)
- Display backlight
- Test light to illuminate sampling area
- 4 daily, programmable alarms
- Clock
- 250-test memory with date/time
- 14-day average
- Easy-to-read display
- Data interface port

* Data on file: testing was done on forearm.

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle Flash™ Meter and FreeStyle® Test Strip

Getting Started with the FreeStyle Flash Meter

Abbott Diabetes Care has developed and tested your FreeStyle Flash Meter, FreeStyle Test Strips, and FreeStyle Control Solution to provide precise and accurate results.

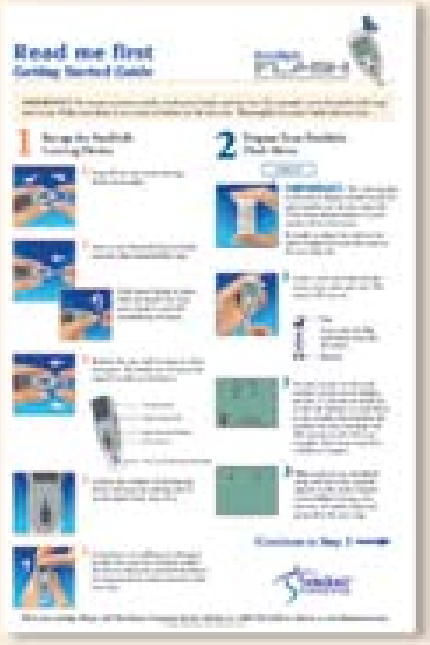
These items are included in your FreeStyle Flash Blood Glucose Monitoring System:

1. Getting Started Guide
2. Owner's Booklet
3. Quick Reference Guide
4. FreeStyle® Control Solution
5. FreeStyle Test Strips (10 Count)
6. FreeStyle Lancing Device with Clear Cap (for testing sites other than the finger)
7. Grey Cap for Lancing Device (for finger testing)
8. FreeStyle Flash Meter
9. Sterile FreeStyle Lancets (10 Count)
10. Carrying Case
11. Daily Log
12. Warranty Registration Card (not shown)
13. Two pre-installed #2032, 3 volt, lithium batteries (not shown)

Downloaded from www.Manualslib.com manuals search engine

FreeStyle Flash™ System

1.



2.

3.

8.

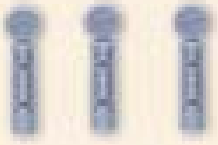
6.

7.

4.

5.

9.



10.

11.

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle Flash™ Meter and How It Works

Data Port

Allows you to transfer data from the meter's memory to a computer or upload to a secure, protected website designed for diabetes data management. Refer to "Transferring Data" on page 45 for more information.

Display Screen

Displays your test results and other important information. Built-in display backlight for use in low-light conditions.

m (Mode) Button

The "**m**" button is used to:

- Moves to different screens such as memory and setup.
- Changes the code (scrolls backward).
- Silences an alarm.

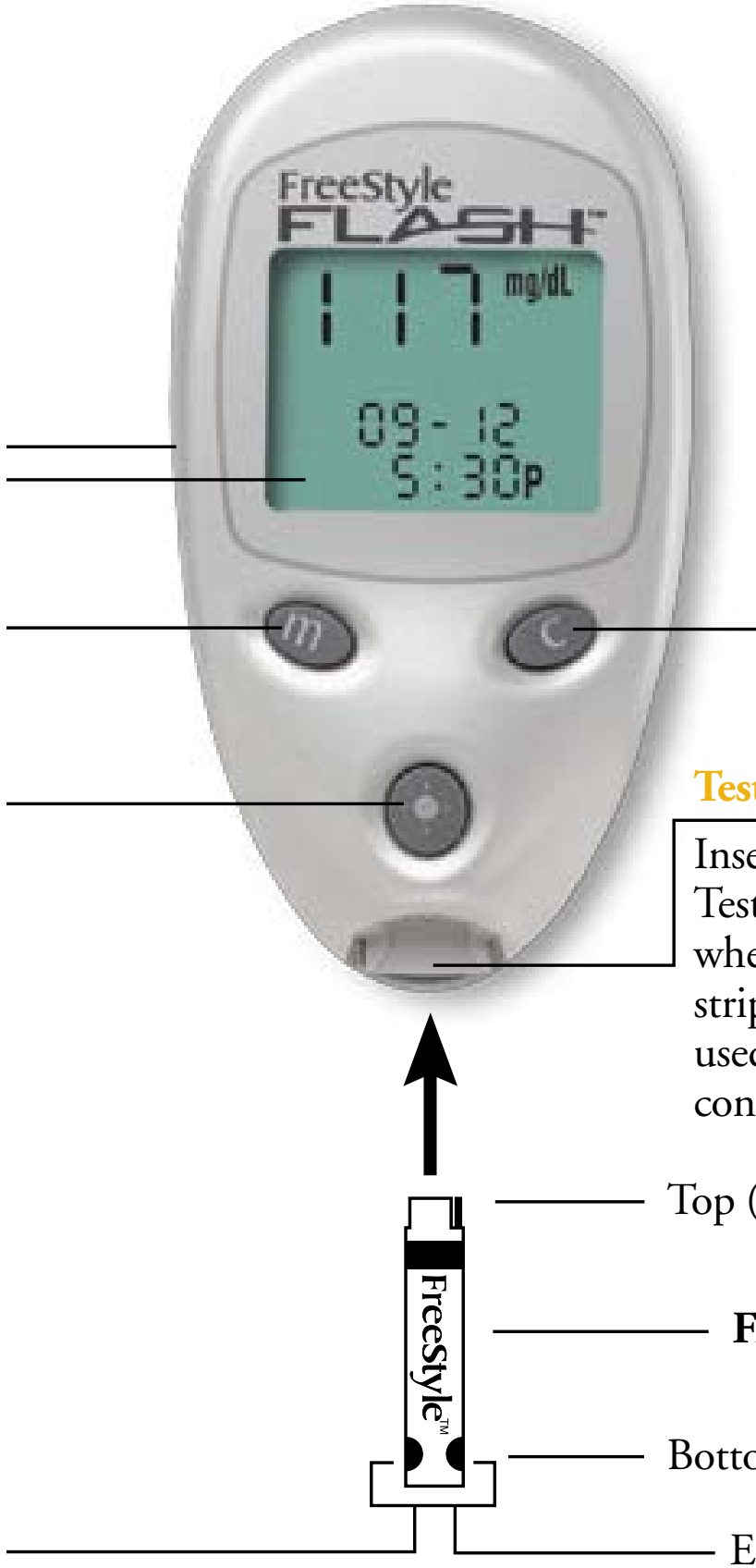
Light Button

Controls the display backlight and test light.

Sample Target Areas (dark-colored half-circles on test strip)

Apply blood or control solution to one edge of the strip only. Insert printed side up (with the dark colored square going into the meter).

Downloaded from www.Manualslib.com manuals search engine



c (Configure) Button

The "**c**" button is used to:

- Marks a test result as control solution.
- Changes the test strip code (scrolls forward), time, alarm settings, sound options, date, unit of measurement, and reviews stored readings.
- Silences an alarm.

Test Strip Port

Insert the Top end of a new FreeStyle Test Strip here. The meter powers on when you insert the test strip. The test strip port has a test light that can be used to light a testing area in low-light conditions.

Top (for insertion into meter)

FreeStyle® Test Strip

Bottom (for blood sample)

Edge of test strip

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle Flash™ Meter Display

Check Owner's Booklet Symbol

Appears when the meter detects LO or HI blood glucose, out of temperature range results, low batteries, data cable inserted and error messages.

Note: Always refer to *FreeStyle Flash Owner's Booklet* when this appears.

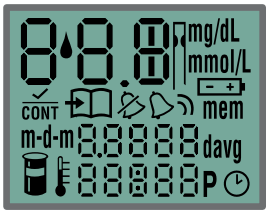
Control Solution Test Result Symbol

Shows that you have marked a test result as a control solution test.

Message Area

Date, time, number of tests in average, and software version number appear here.

Downloaded from www.Manualslib.com manuals search engine

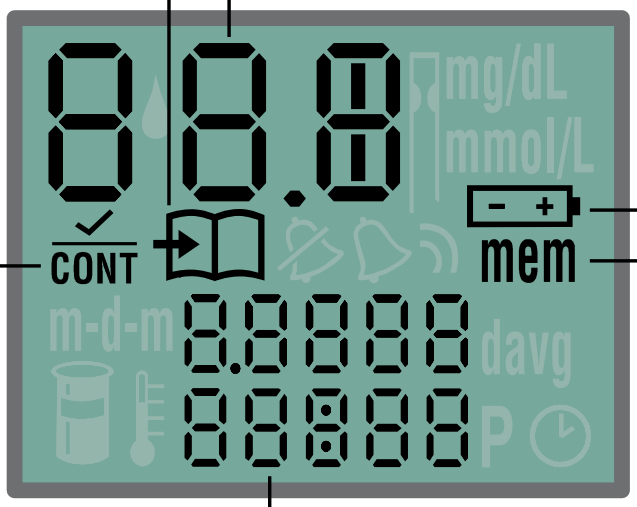


System Check Screen

This screen always appears when the meter leaves clock mode so that you can ensure the display is working properly.

Test Result Area

Test results appear here. A decimal point appears only when the unit of measurement is in millimoles per liter (mmol/L).



Battery Symbol

Appears when you should replace your meter batteries.

Memory Mode Symbol

Shows you a test result stored in the meter memory. The meter stores your last 250 blood glucose test results.

Downloaded from www.Manualslib.com manuals search engine

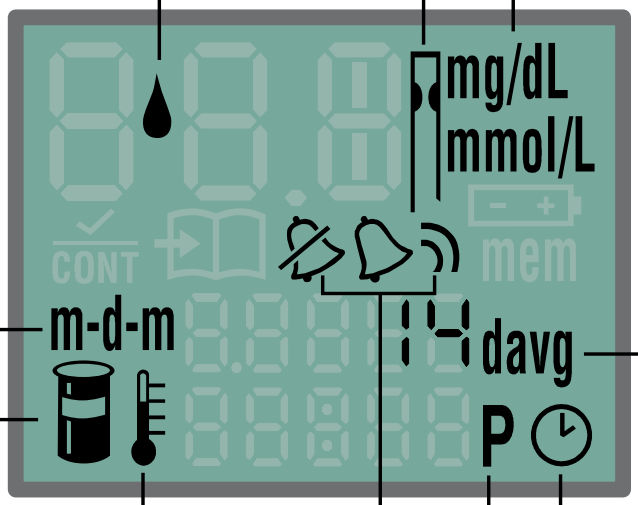
The FreeStyle Flash™ Meter Display

Blood Drop and Test Strip Symbols

These symbols work together in an animation to tell you when the meter is ready for you to apply blood or control solution.

Date Setup Symbol

d-m or **m-d** appears in Set mode when setting the date format (for either the day-month or month-day format).



Check and Set Test Strip Code Symbol

Appears when you should check and set the test strip code.

Thermometer Symbol

Appears if your meter is out of temperature range for getting an accurate reading.

Downloaded from www.Manualslib.com manuals search engine

mg/dL (U.S. Standard) or mmol/L

The units of measurement used for your test result.

14-Day Average Symbol

Appears with a glucose reading that equals the average value of the readings from the last 14 days (refer to page 43).

Clock Symbol

A clock symbol appears in the Clock mode and in the Set mode when setting the time.

P Symbol

Indicates PM in 12-hour format.

Sound Level Symbols

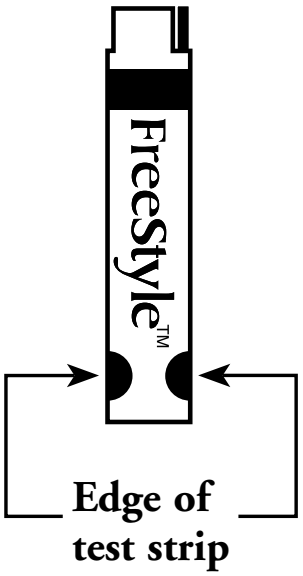
Indicates whether the meter sound prompt (beep) is set to high, low, or off.

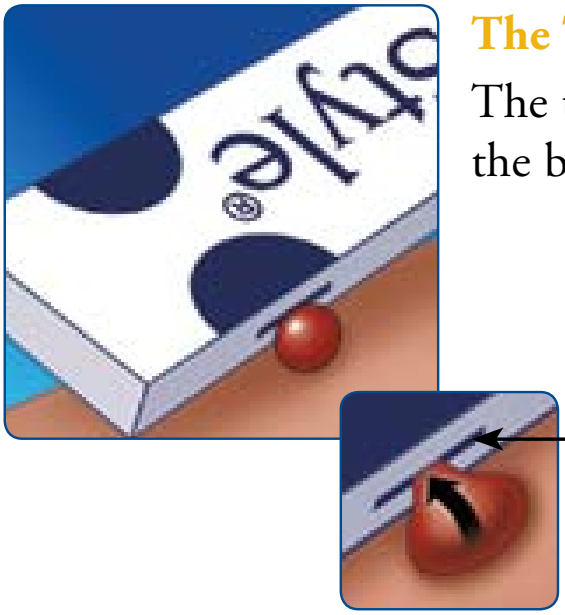
Downloaded from www.Manualslib.com manuals search engine

The FreeStyle® Test Strip

Apply blood or control solution to only ***one edge*** of the test strip per test.

Important: *Use only one edge of the test strip per test. Do not apply blood to both edges. Test strips may be used only once. Discard used test strips.*





The Test Strip Does the Work

The test strip acts like a sponge and pulls the blood into the strip through the edge.

Edge of test strip

WARNING: Keep the test strip vial away from children. The cap is a choking hazard. The cap or vial contains drying agents that may be harmful if inhaled or swallowed and may cause skin or eye irritation.

Downloaded from www.Manualslib.com manuals search engine

Important Test Strip Information

- The FreeStyle Flash™ System has an operating range of 40° to 104°F (5° to 40°C).
- Use the test strips only within the system operating temperature range.
- Store the test strip package in a cool, dry place between 37° to 86°F (3° to 30°C).
- Keep away from direct sunlight and heat.
- Store your test strips in their original vial only; never transfer them to another vial or any other container or carrying case.
- Never store individual test strips outside the vial.
- After removing a FreeStyle® Test Strip from the vial, immediately replace the vial cap and close tightly.
- With clean, dry hands, you may gently touch the test strip anywhere when removing it from the vial or inserting it into the meter.
- Do not use test strips beyond the expiration date printed on the package as this may cause inaccurate results.
- Do not bend, cut, or alter FreeStyle Test Strips in any way.

Note: For detailed storage and usage information, refer to the FreeStyle Test Strip package insert.

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle® Control Solution

All About FreeStyle Control Solution

What is FreeStyle Control Solution?

It is a red liquid that contains a fixed amount of glucose and has three important uses:

- To practice testing without having to use your own blood.
- To ensure that your meter and test strips are working together properly.
- To check that you are following the correct testing procedure.

What is the best way to check my FreeStyle Flash™ Meter?

Perform a test using the FreeStyle Control Solution. A control solution test follows the same procedure as a blood glucose test, except that you use a sample of control solution instead of a drop of blood (refer to pages 19 to 20 for information on performing a control solution test).

How does the control solution test tell me my meter is working properly?

If the meter reading is within the control solution acceptable range, the meter is working properly.

Downloaded from www.Manualslib.com manuals search engine

When should I perform a control solution test?

- When you question your results and want to confirm that your monitor and test strips are working properly.
  For information on how to obtain Control Solution, call Customer Care at 1-800-522-5226.

How do I know if my control solution has expired?

FreeStyle® Control Solution is good for three months after opening the bottle, or until the expiration date printed on the label, whichever comes first. Count forward three months from the date you open a new bottle of control solution. This is your discard date. Write this date on the side of the control solution bottle.

Example: You open the control solution on January 15th. Count forward three months to April 15th. This is the discard date that you record on the bottle.

Downloaded from www.Manualslib.com manuals search engine

Ensuring Accurate Control Solution Results.

- Use only FreeStyle® Control Solution with your FreeStyle Flash™ Meter. The use of other brands of control solution with the FreeStyle Flash Meter may produce inaccurate results.
- Replace the cap on the control solution bottle immediately after using.
- Do not use control solution past the expiration date or you may get inaccurate results.
- Do not add water or any liquid to control solution.
- Control solution tests are specified to be accurate only when performed between 59° to 104°F (15° to 40°C).

Caution: Results from FreeStyle Control Solution tests do not reflect your blood glucose level.

Downloaded from www.Manualslib.com manuals search engine

How do I know if the control solution test results are accurate?

- The control solution test results should fall within the range printed on the test strip vial label.

  Important: *The control solution range is a target range for control solution only. It is not a target range for your blood glucose level.*

- If control solution test results are out of this range, ***repeat the test***.

- Out of range test results may be caused by:
  - Expired or bad control solution.
  - Expired or bad test strip.
  - Error in performing test.
  - Watered-down control solution.
  - Code on test strip vial does not match code set in meter.
  - Meter malfunction.
  - Control solution test done outside 59° to 104°F (15° to 40°C).

If your control solution test results continue to fall outside the range printed on the test strip vial:

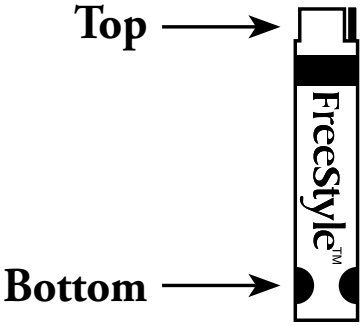
1. The FreeStyle Flash™ System may not be working properly.
2. Do not use the FreeStyle Flash System to test your blood glucose.
3. Call Customer Care.

Where can I obtain FreeStyle Control Solution?

- Contact Customer Care to find out where you can obtain FreeStyle Control Solution.

Downloaded from www.Manualslib.com manuals search engine

Performing a Control Solution Test



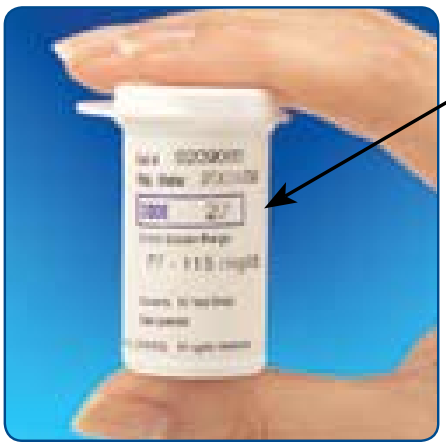
Insert only the **Top** end of test strip into the meter (with the dark-colored rectangle going into the meter).

1

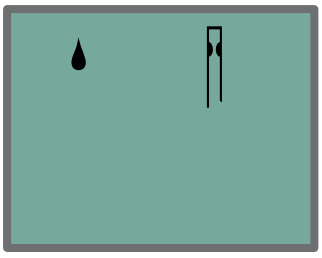
Grasp the bottom of the test strip with the name "FreeStyle" on the test strip facing up.

Insert the top of the test strip into your meter until it stops. This will power on the meter.

2



The code number on the meter display should match the code number on the side of your test strip vial. They must always match, or your results will be inaccurate. (Refer to "Setting the Test Strip Code" on pages 29 and 30.)



Wait for the meter to display the Blood Drop and Test Strip symbols.

Note: Be ready to adjust the code on the meter to match the code on the test strip vial.

Downloaded from www.Manualslib.com manuals search engine

3

Gently touch only ***one edge*** of the test strip to the control solution. Specifically, apply the control solution to the test strip edge next to one of the dark-colored half-circles.

If the sound prompt is on, your meter beeps once when the test strip is full.

A short line then moves clockwise around the display screen while the sample is being processed.

Important: *Do not apply control solution to both edges of test strip.*

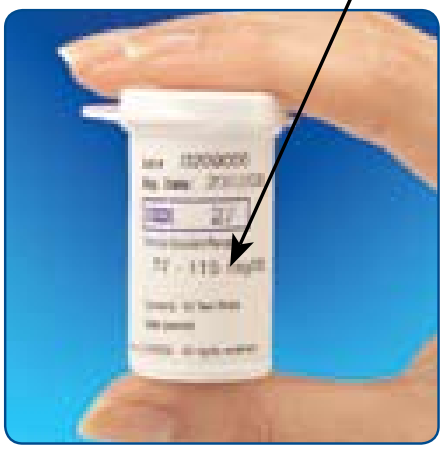
If the sound prompt is on, your meter beeps twice and the result appears on the display screen in about 7 seconds. To mark the result as a control solution result, press and hold the "**c**" button on the FreeStyle Flash™ Meter for two seconds.

Wait for the control solution symbol (✓CONT) to appear on the display screen.

If you have marked a test as a control solution test by mistake, you can unmark it by pressing and holding the "**c**" button again for two seconds.

Pressing the "**m**" button for two seconds saves the test result and allows you to enter the meter memory.

4



Compare your control solution test results to the range printed on your test strip vial label.

Your control solution results should fall within the range printed on the side of your test strip vial.

If your test results do not fall within range, refer to page 18. To return the meter to clock mode, remove the test strip.

Important: *Be sure to discard used test strips. (Test strips may be used only once.)*

Downloaded from www.Manualslib.com manuals search engine

The FreeStyle® Lancing Device

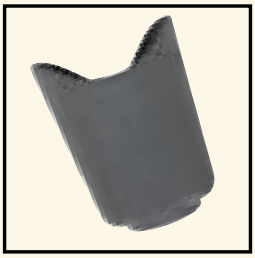
Cocking Handle

Depth Settings Dial

Depth Indicator Window

Release Button

Clear Cap
(for testing sites other than the finger)



Grey Cap
(for finger testing)

Downloaded from www.Manualslib.com manuals search engine

Using the Lancing Device

1

Remove Cap

Snap off the cap on the lancing device at an angle.

2

Insert Lancet

Insert a new FreeStyle® Lancet firmly into the white lancet holder cup. (Pushing the lancet into the cup may cock the device; this is okay.)

3

Twist Off the Rounded Top

Hold the lancet firmly in place with one hand; use your other hand to twist off the rounded top.

Downloaded from www.Manualslib.com manuals search engine

4

Replace Cap

Replace the cap until it snaps or clicks into place. Be careful not to touch the exposed needle on the lancet.

Important: *Use the grey cap for finger tests. Lancing with the clear cap may be completed at the following test sites: forearm, upper arm, hand, thigh, and calf. Page 24 shows an example of lancing on the forearm.*

5

Set the Lancing Level

The FreeStyle® Lancing Device offers four different depth settings. Move the dial to the desired setting as shown in the depth indicator window. Level 1 is the shallowest depth; Level 4 is the deepest. To lance parts of the body other than the finger, we recommend that you start at Level (2) and use the clear cap. To lance your finger, we recommend that you set the depth setting to its shallowest depth (1) and use the grey cap.

6

Cock the Handle

Pull the dark grey cocking handle out until it clicks. (You may have already cocked the handle in step 2; this is okay.)

You are now ready to perform a blood glucose test.

Downloaded from www.Manualslib.com manuals search engine

Lancing

Clear Cap

Lancing Your Forearm, Upper Arm, Hand, Thigh, or Calf

Important: *Use the clear cap for testing on your forearm, upper arm, hand, thigh, or calf.*

To bring fresh blood to the surface of the test site, rub the test site vigorously for a few seconds until you feel it getting warm.

a. We recommend that you set the depth setting on the lancing device to (2).

b. Hold the clear cap down against the top of your test site. Depress the release button. Do not lift up.

c. Continue to hold the lancing device and gradually increase pressure for several seconds.

d. While holding the lancing device on your test site, look through the clear cap; the blood sample should be about the size of a pinhead (example: •).

e. Lift the lancing device straight up; be careful not to smear the blood sample on your test site.

Important: *Avoid lancing areas with obvious veins or moles to avoid excess bleeding.*

Important: *Avoid lancing areas where tendons or bones stick out (for example, hand bones and ankle bones).*

Downloaded from www.Manualslib.com manuals search engine

Lancing *(continued)*

Grey cap

Lancing Your Finger

Important: *Use the grey cap for finger testing.*

Stimulate blood flow by keeping your hand warm or by lowering your hand to waist level and by gently massaging your finger.

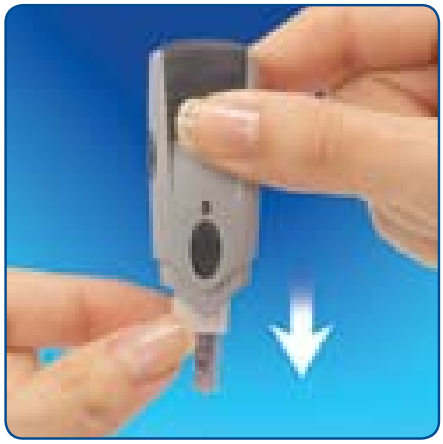
a. We recommend that you set the depth setting on the lancing device to its shallowest depth (1).

b. Lightly touch the lancing device (with the grey cap) against the side of your finger tip.

c. Press the release button, and then place the lancing device on the table or desk near you.

d. Gently squeeze your finger, if needed, until a blood drop the size of a pinhead forms (example: •).

Downloaded from www.Manualslib.com manuals search engine



Removing the Lancet

When you have finished testing, snap off the cap from the lancing device.

Hold the lancet over a sharps container or a puncture-proof container with a lid. Pinch the white clip that holds the lancet until the lancet falls out.

Potential Bruising

It is possible you may experience bruising at the test site. If bruising does occur, you may choose to lance your finger or another site instead of your forearm. Refer to page 1 for information on testing other sites.

Maintenance

Use isopropyl alcohol or soap and water to wipe the outside of the lancing device. If you wish, remove the cap, wash it in warm water and rinse well.

Important: *Do not immerse the body of the lancing device in water or any other liquid.*

Downloaded from www.Manualslib.com manuals search engine

Testing Your Blood Glucose

Important: *To ensure accurate results, wash your hands and test site (for example, your forearm) with soap and water. Make sure there is no cream or lotion on the test site. Thoroughly dry your hands and test site.*

- With the FreeStyle Flash™ System, you can test your blood glucose on your forearm, upper arm, hand, thigh, calf, as well as your fingers.
- Testing with the FreeStyle Flash System requires a very small sample size, just 3/10th microliter of blood; about the size of a pinhead (**example:** •).
- Most healthcare professionals recommend testing when blood glucose values are stable: before meals and before bedtime. However, when blood glucose is changing, blood from the fingertips or palm (at the base of the thumb) may show these changes sooner than blood from other sites.

WARNING: We recommend that you test on your fingers or palm (at the base of the thumb) if you are testing for hypoglycemia (low blood glucose) or if you suffer from hypoglycemia unawareness.

Times when you may be checking for low blood glucose include:

- When you are feeling symptoms such as weakness, sweating, nervousness, headache, or confusion.
- When you have delayed a meal after taking insulin.
- When your healthcare professional advises you to do so.

Downloaded from www.Manualslib.com manuals search engine

Blood Glucose Testing Components

Downloaded from www.Manualslib.com manuals search engine

Performing a Blood Glucose Test

Before performing a blood glucose test, prepare the lancing device (refer to pages 22 and 23 for more information).

1

Prepare Your Meter

a. Insert a new test strip into the meter until it stops. The meter powers on.

Top (for insertion into the meter)
Insert only the **Top** end of the test strip into the meter (with the dark-colored rectangle going into the meter).

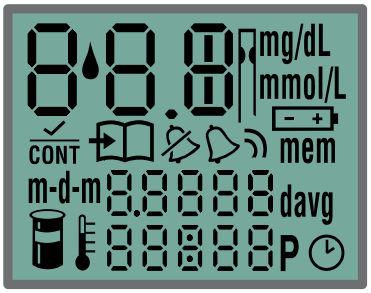
Bottom (for blood sample)

Note: If you do not start the test within two minutes, the meter returns to clock mode. To restart your meter, take out the unused test strip and reinsert it into the meter.

Setting the Test Strip Code

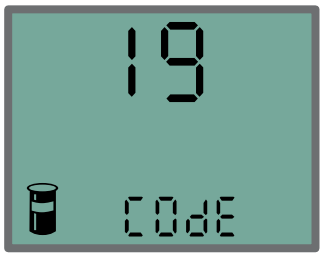
When the meter powers on, three display screens appear in the following order:

1. **System Check**

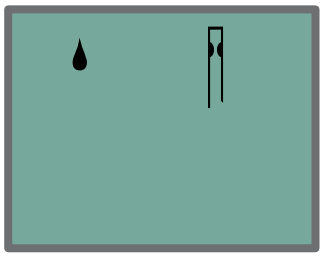


Downloaded from www.Manualslib.com manuals search engine

2. Code Number



3. Blood Drop and Test Strip Symbols



Note: To ensure accurate test results, make sure the code number on your meter display always matches the code number in the box outlined in blue, located on the side of the test strip vial.

b. When you see the word "COdE" and a code number on the display screen, use the "**c**" (configure) button to scroll forward or the "**m**" (mode) button to scroll backward until the number matches the number on your test strip vial. The FreeStyle Flash™ Meter has a total of 50 codes.

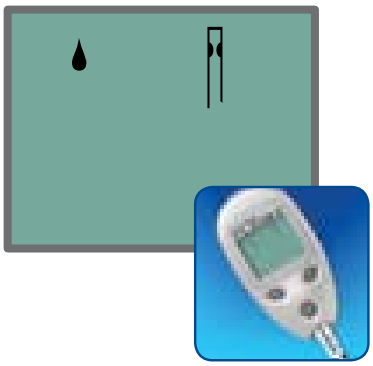
c. After you set your code number, the Blood Drop and Test Strip symbols will alternate on the display screen.

d. If you want to return to the code number display screen after the Blood Drop and Test Strip symbols appear, press the "**c**" button.

Caution: Take care to not press the "**c**" or "**m**" buttons when you are holding the meter while performing the blood test. If you do, you might change the code and get an incorrect reading or an Error 6.

Downloaded from www.Manualslib.com manuals search engine

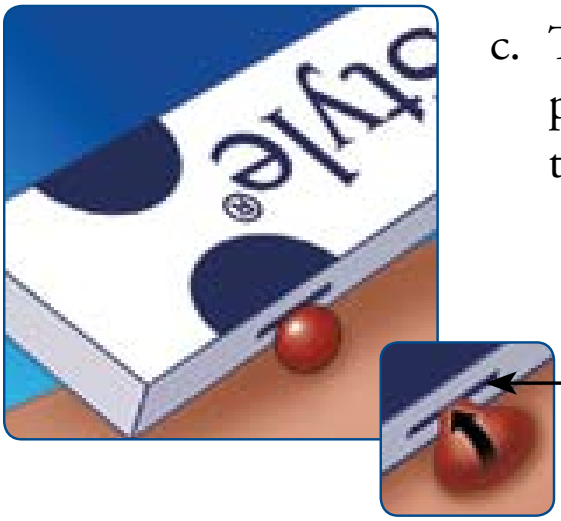
2 Filling the Test Strip with Blood



a. Make sure that the test strip is in the meter and the meter is powered on. (If the meter is in clock mode, take out the test strip and reinsert it into the meter.) Leave the test strip in the meter. You are now ready to apply the blood sample.

b. Bring the test strip to the blood sample at a slight angle.

Important: *Use only one edge of the test strip per test. Do not apply blood to both edges. Test strips may be used only once. Discard used test strips.*



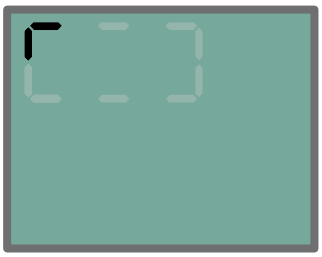
c. The test strip acts like a sponge and pulls the blood into the strip through the edge.

STOP

- **Do not** *press* the test strip against the test site.
- **Do not** scrape the blood onto the test strip.
- **Do not** apply blood to the flat side of the test strip.
- **Do not** apply blood to the test strip when the test strip is out of the meter.
- **Do not** put blood or foreign objects into the test strip port.

Downloaded from www.Manualslib.com manuals search engine

3



Waiting for Result

- Do not lift the test strip up until you hear one beep (if sound is turned on) **or** see the short line moving clockwise on your meter screen. This means you have enough blood and the meter is reading your glucose.
- If after five seconds your meter does not show a short line moving around the display screen, the sample may be too small. You may add blood to the same edge of the test strip from which you started for up to 60 seconds from the time of the first application.

- The test result is complete when you hear *two* beeps (if sound is turned on). Your blood glucose test result is shown on the display screen.
- The time that the meter takes depends on your blood glucose level. The higher your glucose level, the longer it takes to get a result. Results appear in an average of 7 seconds.

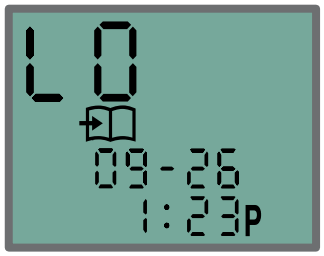
Important:

- *Make sure the apply sample symbols show on the display (alternating test strip and blood sample).*
- *Use only one edge of the test strip per test.*
- *If blood is applied to both edges, you can get an inaccurate result.*
- *If you have performed a test using both edges of the test strip, repeat the blood glucose test using a new test strip and a fresh blood sample.*

Downloaded from www.Manualslib.com manuals search engine

LO Readings

Important: *Low or high blood glucose readings can indicate a potentially serious medical condition. The FreeStyle Flash™ Meter displays results from 20 to 500 mg/dL (1.1 to 27.8 mmol/L).*



LO Reading

LO Reading

If your test result is lower than 20 mg/dL (1.1 mmol/L), LO appears on the meter display screen. This reading indicates severe hypoglycemia (low blood glucose).

LO Reading *with* Symptoms

If you have a LO reading and have symptoms such as weakness, sweating, nervousness, headache, or confusion, **then** follow your doctor's recommendations to treat hypoglycemia.

LO Reading *without* Symptoms

If you get a LO reading, but have no symptoms of low blood glucose, **then** retest with a new test strip. If you still get a LO reading, follow your doctor's recommendation to treat hypoglycemia.

Downloaded from www.Manualslib.com manuals search engine

HI Readings

HI Reading

HI Reading

If your test is above 500 mg/dL (27.8 mmol/L), HI appears on the display screen. This indicates severe hyperglycemia (high blood glucose).

HI Reading *with* Symptoms

If you feel symptoms such as fatigue, thirst, excess urination, or blurry vision, **then** follow your doctor's recommendation to treat hyperglycemia.

HI Reading *without* Symptoms

If you get a HI reading, but have no symptoms of high blood glucose, **then** retest with a new test strip. If you still get a HI reading, follow your doctor's recommendation to treat hyperglycemia.

Downloaded from www.Manualslib.com manuals search engine

Appendices

1. Using Your Meter's Lights

Depending on what mode your meter is in, pressing the light button (☀) lights either the display backlight or the test light.

Using the Display Backlight

Pressing the light button powers on the display backlight in all modes except when applying a sample (for example, clock, memory and set).

The display backlight goes out when you press the light button (☀) again or when the meter is inactive for **10 seconds**.

Using the Test Light

Pressing the light button while the Blood Drop and Test Strip symbols appear on the display screen powers on the test light. The test light goes out:

- When you press the light button again.
- When the meter receives the correct amount of blood for a test (the test strip is filled).
- After **60 seconds** of no activity.
- When a test strip is removed from the meter.

Downloaded from www.Manualslib.com manuals search engine

If you use either the backlight or the test light during the test mode, the backlight lights again to show you the test results after the measurement is complete.

2. Using Alarms

There are four alarms that you can set. When an alarm goes off, you hear the sound for up to 15 seconds. You can silence the alarms by pressing either the "**m**" or "**c**" buttons or by inserting a test strip.

The bell ( ) icon will be displayed if any of the four alarms has been set.

Refer to page 38 for information on setting an alarm.

Downloaded from www.Manualslib.com manuals search engine

3. Meter Screen Displays

Setting Up Your Meter

- ***To Enter Setup Mode***

  Start with the meter in clock mode (and no test strip inserted). Press and firmly hold the "**m**" (mode) button until the SET display screen appears.

- ***To Exit at Any Time***

  Press and hold the "**m**" button until the meter returns to clock mode.

- ***To Move Through the Screens***

  Press the "**m**" button to move through all the set-up screens such as alarm, sound level, time, date, unit of measurement, and software version number.

  Press the "**c**" (configure) button to change setting within a set-up screen.

Example: Use the "**m**" button to bring up the blinking unit of measurement display screen. Press the "**c**" button to select the desired Unit of Measurement; mg/dL (U.S. Standard) or mmol/L.

Downloaded from www.Manualslib.com manuals search engine

Setting the Alarm

An alarm is set if the sound level is set to low or high. This will show in set-up mode with a bell (alarm) icon displayed. An alarm is off if the alarm volume is off. This will show in set-up mode with a bell (alarm) icon with a slash/stroke through it. Any or all of the four alarms (alarm 1 through alarm 4) can be set. An alarm will never sound during a test.

Move to next Set screen – Sound

Select alarm

Select hour

Select minute

Select alarm volume

1. With the alarm number blinking, press the "**c**" button until the correct alarm number blinks. You can review the current alarm setting.
   Note: Pressing "**m**" when 0 is blinking, moves you to the next meter setup screen: "Setting the Sound."
2. Press the "**m**" button to move to the hour setting.
3. With the hour blinking, press the "**c**" button until the correct hour appears.
4. Press the "**m**" button to move to the minute setting.
5. With the minute blinking, press the "**c**" button until the correct minute appears.
6. Press the "**m**" button to move to the alarm volume setting. Default setting is off.
7. With one of the bell icons appearing, press the "**c**" button until the desired alarm volume appears.
8. Press the "**m**" button to return to the main alarm setup screen.

Repeat steps 1 through 8 (as needed) to set the other alarms. (You can set up to four alarms.)

Downloaded from www.Manualslib.com manuals search engine

Setting the Sound

Off

Low

High

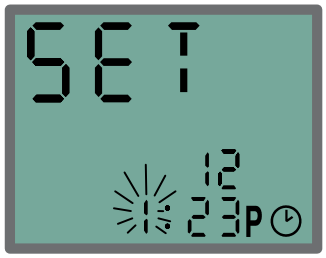
There are three sound volume options to let you know when the test strip is full, when the reading is done, and when an error occurs: Off, Low, and High (default setting).

1. Press the **"c"** button until the desired sound level appears.

2. Press the **"m"** button to move to "Setting the Time."

Downloaded from www.Manualslib.com manuals search engine

Setting the Time



Hour

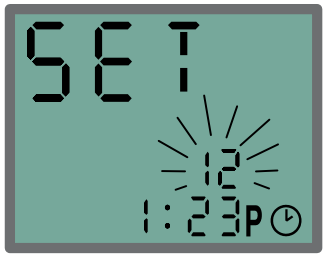
1. With the clock symbol showing and the hour blinking, press the "**c**" button until the correct hour appears.

   Note: If using the 12-hour time format, the P displays for "PM" times.

Minute

2. Press the "**m**" button to move to minute setting.

3. With the minute blinking, press the "**c**" button until the correct minute appears.



Time Format

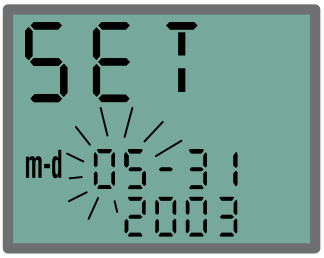
4. Press the "**m**" button to move to the time format setting (12- or 24-hour format).

5. With the 12 (for 12-hour format) or 24 (for 24-hour format) blinking, press the "**c**" button to toggle to your format choice. The time automatically updates to the format selected.

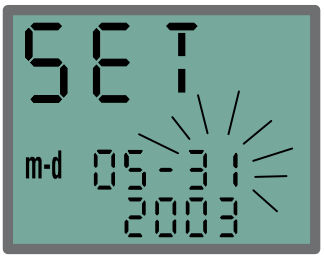
6. Press the "**m**" button to move to "Setting the Date."

Downloaded from www.Manualslib.com manuals search engine

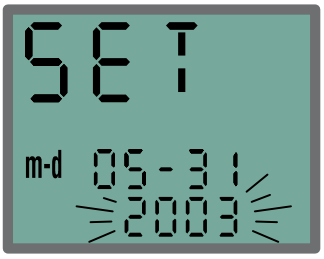
Setting the Date



Month



Day



Year

1. With the month blinking, press the **"c"** button until the correct month appears.
2. Press the "**m**" button to move to the day setting.
3. With the day blinking, press the "**c**" button until the correct day appears.
4. Press the "**m**" button to move to the year setting.
5. With the year blinking, press the "**c**" button until the correct year appears.
6. Press the "**m**" button to move to the date format setting (month-day (m-d) or day-month (d-m) format).
7. With the m-d or d-m icon blinking, press the "**c**" button to toggle to your format choice. The date automatically updates to the format selected.
8. Press the "**m**" button to move to "Setting the Unit of Measurement."

Setting the Unit of Measurement

1. Press the "**c**" button to toggle to the Unit of Measurement you want:
   - milligrams per deciliter (mg/dL); U.S. Standard
   - millimoles per liter (mmol/L)
2. Press the "**m**" button to move to the "Software Version Display."

Downloaded from www.Manualslib.com manuals search engine

Software Version Display

This is the software version programmed in your FreeStyle Flash™ Meter. It is for display only, and cannot be changed.

The picture to the left is an example. Your meter may have a different number.

Write the software version shown on your meter display on page 65.

Customer Care may ask you to provide this number when you call with questions or concerns regarding your FreeStyle Flash Meter.

To exit the software version display screen, press and hold the "**m**" button for a few seconds until the meter returns to clock mode.

Downloaded from www.Manualslib.com manuals search engine

4. Viewing Your Meter Memory

Getting In and Out of Memory

- ***To Enter***

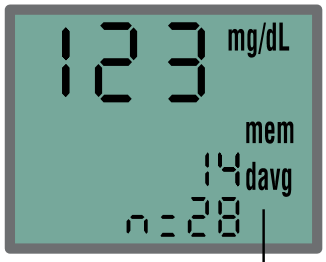
  Start with the meter in clock mode (and no test strip inserted). Press the "**m**" button and release; the first memory screen to appear is your 14-day average.

- ***To Exit at Any Time***

  Press the "m" button until the meter returns to clock mode, then release.

14-Day Average

The first memory display screen you see is your 14-day average. This includes all the readings from the last 14 days starting from the current date and time shown on the meter. (Control solution, LO, and HI readings are not included in the average.)



14d avg = your 14-day average

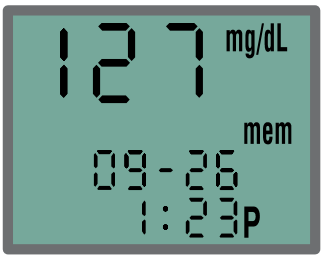
n = indicates the number of results included in your 14-day average

Downloaded from www.Manualslib.com manuals search engine

Working the Memory

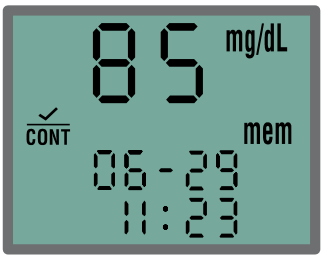
The meter stores the last 250 test readings with time and date. You may scroll through all of the readings by pressing and holding the "**c**" button. The first reading you see is the most recent result. As you continue to push the "**c**" button the meter scrolls back to older readings. Eventually it scrolls to the most recent reading again.

Blood Glucose Test



A result without a control solution symbol (CONT) indicates that it is a blood glucose reading. The date and time of the test appears on the bottom of the screen.

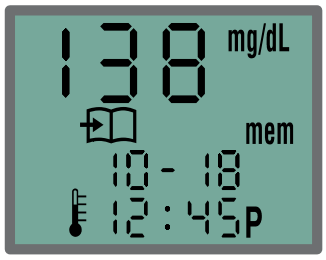
Control Solution Test



A value with (CONT) indicates that you have marked this reading as a control solution test (refer to page 20). This result is **not** included in your 14-day average. The date and time of the control solution reading appears on the bottom of the screen.

Downloaded from www.Manualslib.com manuals search engine

Special Notes

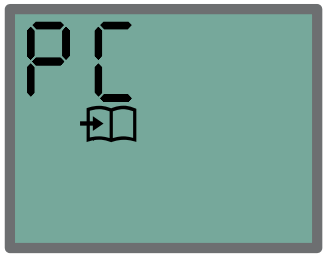


Temperature: A result with a thermometer symbol indicates that the reading was taken outside of the meter's specified operating temperature range and may be less accurate. This value is included in your 14-day average.

LO Reading: A LO reading (under 20 mg/dL [1.1 mmol/L]) is included in the memory; it is **not** included in your 14-day average. Values under 20 mg/dL are recorded in memory as LO.

HI Reading: A HI reading (over 500 mg/dL [27.8 mmol/L]) is included in the memory; it is **not** included in your 14-day average. Values over 500 mg/dL are recorded in memory as HI.

Transferring Data



The data port allows you to download test results from the meter's memory to a computer or upload to a secure, protected website designed for diabetes data management. (Requires FreeStyle Data Cable, and FreeStyle data management software or other software programs that accept FreeStyle Flash data.)

You will see the word "PC" on the display screen when the FreeStyle Data Cable is inserted into the data port. The meter will display "PC" until the cable is removed from the data port.

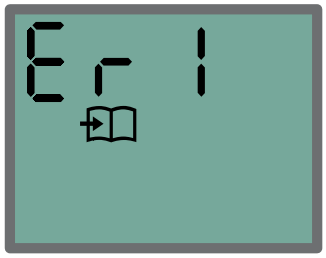
For more information, please go to our website or call Customer Care.

Note: You will not be able to perform a test when the cable is inserted in the data port.

Downloaded from www.Manualslib.com manuals search engine

5. Error Messages

Error 1



Possible Causes

- Sample is too small.
- Problem with the test strip.
- Problem with the meter.
- **Very** low blood glucose
  (less than 20 mg/dL [1.1 mmol/L]).

What You Should Do

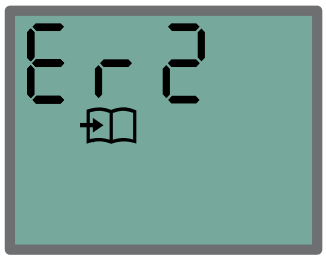
1. If you have symptoms such as weakness, sweating, nervousness, headache, or confusion, follow your doctor's recommendation for treating hypoglycemia.

2. Conduct a control solution test using a new test strip. If the results of the control solution test are within the range printed on the side of your test strip vial, retest using blood and a new test strip.

3. If the retest using control solution does not work, or the error persists, call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

Error 2



Possible Causes

- Problem with the test strip.
- Problem with the meter.
- **Very** high glucose (above 500 mg/dL [27.8 mmol/L]).
- HIGH control solution applied when temperature is too cold. (This applies only to control solution that is labeled as HIGH.)

What You Should Do

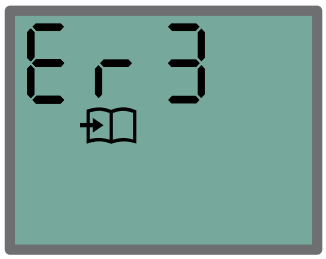
1. If you have symptoms such as thirst, fatigue, excess urination, or blurry vision, follow your doctor's recommendation for treating hyperglycemia.

2. Conduct a control solution test using a new test strip. If the results of the control solution test are within the range printed on the side of your test strip vial, retest using blood and a new test strip.

3. If the retest using control solution does not work, or the error persists, call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

Error 3



Possible Causes

- Incorrect test procedure. For example, putting blood on the test strip before inserting the test strip into the meter, or blood applied before the Blood Drop and Test Strip symbols appear.
- Problem with the test strip.
- Problem with the meter.

What You Should Do

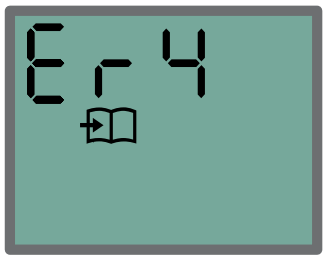
1. Be sure you see the Blood Drop and Test Strip symbols on the display screen before you apply blood or control solution.

2. Conduct a control solution test using a new test strip. If the results of the control solution test are within the range printed on the side of your test strip vial, retest using blood and a new test strip.

3. If the retest using control solution does not work, or if the error persists, call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

Error 4



Possible Causes

- Problem with test strip.
- Meter malfunction.

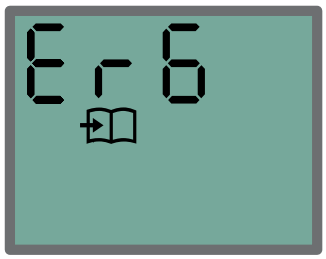
What You Should Do

1. Conduct a control solution test using a new test strip. If the results of the control solution test are within the range printed on the side of your test strip vial, retest using blood and a new test strip.

2. If the retest using control solution does not work, or if the error persists, call Customer Care.

Note: Error 5 is not used.

Error 6



Possible Causes

Blood sample was applied while code number was being changed.

What You Should Do

1. Retest using a new test strip. Do not touch the "**m**" or the "**c**" button while applying blood or control solution to the test strip.

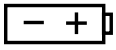
2. If the error persists, call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

6. Batteries

Your FreeStyle Flash™ Meter comes with two preinstalled #2032, 3 volt, lithium batteries. The batteries provides enough power for the meter to perform about 500 tests, and to power the display backlight and test light.

Important: *When the battery symbol appears or when the backlight and test light begin to dim, you should replace your batteries immediately.*

If your batteries run low, the battery symbol () appears on every display screen until you change the batteries. You have enough power for approximately 25 more tests.

- To avoid losing the time and date settings, replace the batteries ***within one minute*** of removing the old batteries.
- If you take more than one minute to replace the batteries, you must reset the time and date to get the correct 14-day average.

  Note: If the time and date are lost, the time and date displays flash 12:00 and 00-00 until they are reset.
- Removing the batteries does not affect the meter's memory log or previously stored user settings (for example, unit of measurement, calibration code, and date format).
- If the time and date settings are not reset, test results are stored in memory with a time of 12:00 a.m. (00:00) and a date of 00-00.

Downloaded from www.Manualslib.com manuals search engine

Replacing the Batteries

1

Turn the meter over. Press in the battery door clip to open. Swing the battery door up to open, and then off the meter.

2

Install the batteries with the positive (+) sign facing up towards you.

3

To close, angle the battery door back onto the meter and swing down until it snaps gently into place.

Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

Troubleshooting

Meter does not enter the test mode after inserting a test strip.

Probable Cause	What to Do
The batteries are dead.	Replace the meter batteries (refer to page 51).
The batteries are installed incorrectly or the batteries are not installed.	Check that batteries are installed correctly with the positive (+) sign facing upward, toward you (refer to page 51). **Note:** If the batteries have been installed incorrectly or have been out of the meter for more than one minute, reset the date and time (refer to page 50).
Test strip inserted upside down, wrong end in, or incompletely inserted into the meter.	Insert the test strip with the printed side up and the top of the strip in the meter (refer to page 8).
Defective meter or test strips.	Call Customer Care.
Blood or foreign objects put into test strip port.	Call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

Test does not start after applying the blood sample.

Probable Cause	What to Do
Blood sample too small.	Repeat the test using a new test strip and a larger blood sample.
Defective test strip.	Repeat the test with a new test strip.
Sample applied after meter times out (after two minutes) and returns to clock mode.	Repeat the test using a new test strip. Wait until you see the Blood Drop and Test Strip symbols on the display screen before you apply the blood sample (refer to page 31).
Defective meter or test strips.	Call Customer Care.

Downloaded from www.Manualslib.com manuals search engine

Caring for Your Meter

- Avoid getting dirt, dust, blood, control solution, water, or any other liquid in the meter's test strip and data ports.
- Store the meter in the carrying case after each use.

Cleaning the Meter

Clean the outside of the meter using a cloth dampened with one of the following:

- Mild detergent/mild soap and water
- 70% isopropyl alcohol
- A mix of one part household bleach, nine parts water

Important: *Avoid getting water or any other liquid into the test strip port and data port.* ***Never*** *immerse the meter in water or any other liquid solution.*

Downloaded from www.Manualslib.com manuals search engine

Meter Specifications

Assay Method	Coulometric electrochemical sensor
Automatically Enter Clock Mode	Two minutes after last user action
Battery Life	Approximately 500 tests
Calibration	Plasma equivalent
Hematocrit	15% to 65%
Measurement Units	Either mg/dL or mmol/L
Memory	250 blood glucose and control solution tests with date and time
Operating Relative Humidity	5% to 90%
Operating Temperature	40° to 104° F (5° to 40° C)
Power Source	Two #2032, 3 volt, lithium batteries, replaceable
Result Range	20 to 500 mg/dL (1.1 to 27.8 mmol/L)
Sample	Whole blood, capillary
Sample Size	300 nanoliters (3/10 microliter)
Dimensions	Width 1.6” x Length 3.0” x 0.8” (at thickest point)
Test Time	Average of 7 seconds
Weight	1.4 oz. (including batteries)

Downloaded from www.Manualslib.com manuals search engine

Index

Alarms 36
Apply Blood Sample 31
Applying Control Solution 19
Assay Method 56
Automatic Enter Clock Mode 56

Batteries 5, 10, 50-52, 56
Batteries, Replacing 51
Batteries, Troubleshooting 53
Battery Life 50, 56
Battery Symbol 10, 50
Blood Drop Symbol 11, 19, 30-31
Blood Glucose Test
    Performing a 29-32
    Memory, Viewing your Meter 43-45
Lancing Forearm, Upper Arm, Hand, Thigh, or Calf 24
Lancing On Your Finger 25
Blood Glucose Testing Components 28
Blood Sample
    Applying Sample After Shut Off 54
    Size 24, 27, 56
    Too Small 32, 46, 54
    Troubleshooting 53-54
    Type 56

Downloaded from www.Manualslib.com manuals search engine

Calibration 56
Caring for Your Meter. 55
Carrying Case 5-6
"**c**" Button 8, 20, 30, 36-41, 44, 49
Cleaning your Meter. 55
Code Number, Test Strip 19
Control Solution, FreeStyle. 5-6, 15-18
    Expiration Date. 16
    Ensuring Accurate Results 17
Control Solution Symbol 9-10, 20, 44
Control Solution Test
    Performing a 19-21
    Memory, In the Meter's 44
    When Should I Perform a 16
Control Solution Test Results
    Target Range 18, 20
    Target Range, Out of. 18, 20
    Accuracy of 17-18
Customer Care 18, 46-49, 53-54

Daily Log 5-6
Data
    Data Port. 7-8
    Transferring Data. 45
Date 11-12
Date, Setting the. 41
Dehydration 3

Downloaded from www.Manualslib.com manuals search engine

Display Screen. 8-12
Apply Sample 31
Battery Symbol 10
Blood Drop Symbol 11-12, 30
Code Number 30
Control Solution Symbol. 9-10
Date 11
Memory. 9-10
Milligrams (mg/dL) 11-12
Millimoles (mmol/L) 11-12
System Check Screen. 10, 29
Test Result Area. 9-10
Test Strip Symbol 11-12
Thermometer Symbol 11, 45
Error Messages
Error 1. 46
Error 2. 47
Error 3. 48
Error 4. 49
Error 6. 49
14-Day Average. 43

FreeStyle Blood Glucose Monitoring System. 2
FreeStyle Control Solution
What is 15
Ensuring Accurate Results 17
Expiration Date. 16

Downloaded from www.Manualslib.com manuals search engine

FreeStyle Lancets 5-6, 22, 26
Lancing at Alternate Sites 24
Lancing Your Finger 25
Disposing of 26
FreeStyle Lancing Device 5-6, 21-26
Clear Cap 21-24
Grey Cap 21, 25
Cocking Handle 23
Depth Settings Dial 21, 23, 24, 25
Using the Lancing Device 22-25
Lancing On Your Forearm,
Upper Arm, Hand, Thigh, or Calf 24
Lancing Your Finger 25
Maintenance 26
Release Button 21
FreeStyle Flash Meter
Batteries 5, 51-53, 56
"**c**" Button 8, 30, 36-41, 44
Caring for Your 55
Carrying Case 5-6
Cleaning the 55
Control Solution 5-6, 15-20
Data Port 7-8, 45
Dimensions 56
Display Screen 7-12
Getting Started 5-6
Hematocrit 56

Downloaded from www.Manualslib.com manuals search engine

Important Information About Your FreeStyle Flash System 2
Lancets 5-6, 22, 26
Lancing Device 5-6, 21-26
Light Button 7-8, 35
"**m**" Button 7-8, 30, 37-43
Operating Relative Humidity 56
Operating Temperature 56
Quick Reference Guide 5-6
Readings, LO and HI 33-34, 45
Serial Number 65
Setting Up Your Meter 37-42
Specifications 56
Memory 9-10, 56
Test Strip Code 19, 28
Test Strip Port 8
Test Time 32, 56
Troubleshooting 53-54
Warranty Registration Card 5
Weight 56

FreeStyle Test Strips 5-6, 7-8, 13-14, 19, 27-28
Code Number, Setting the Test Strip 19, 29-30
Important Information 13-14
Storage and Usage 14
Target Areas, Sample 7-8
Troubleshooting 53-54

Health Related Information, Important
Dehydration 3
Hyperglycemia 3, 34
Hypoglycemia 3, 33
Water Loss, Excessive 3

Downloaded from www.Manualslib.com manuals search engine

Hematocrit 56
HI Reading 34, 45

Lancets, FreeStyle 5-6, 22, 26
Lancets, Disposing of 26
Lancing Device, FreeStyle 5-6, 21-26
Lancing Your Arm 24
Lancing Your Finger 25
Lancing Locations 1
LO Reading 33, 45

Maintenance
    FreeStyle Lancing Device 26
    FreeStyle Flash Meter 55
"**m**" Button 7-8, 30, 37-43
Measurement Units 56
Memory, FreeStyle Flash Meter
    Blood Glucose Test 44
    Control Solution Test 44
    14-Day Average 43
    Getting In and Out of 43
    Size 10, 56
    Working the 44
    Temperature 45
Memory, Viewing Your Meter's 43-45
Meter, Setting Up your
    Date 41
    Date Format 41
    Sound 39

Downloaded from www.Manualslib.com manuals search engine

Time 40
Time Format. 40
Unit of Measurement. 41
Alarms 38
Meter Memory
To Enter/Exit. 43
Meter Settings
To Enter/Exit. 37

Operating Temperature 56
Operating Relative Humidity 56

Power Source. 56

Result Range 56

Sample Size, Blood Glucose 24, 27, 56
Serial Number. 65
Sharps Container. 26
Size 56
Software Version Display. 42
Sound, Setting the. 39
Specifications, FreeStyle Flash Meter 56
Symbols, General
Battery. 10, 50
Blood Drop 11, 19, 30-31
Control Solution 9-10, 20, 44
Thermometer 11, 45

Downloaded from www.Manualslib.com manuals search engine

Symbols, Error 46-49
System Check 10, 29

Target Areas, Sample 7-8
Target Range, Control Solution Test 18, 20
Temperature 11, 45, 56
Testing Blood Glucose
On Your Forearm, Upper Arm,
Hand, Thigh, or Calf. 1, 24
On Your Finger 1, 25
Test Result Area 10
Test Strip Code, Setting the 19, 29-30
Test Strip Port 7-8
Test Strips, FreeStyle 5-6, 7-8, 13-14, 19, 27-28
Important Information 13-14
Troubleshooting. 53-54
Test Time 56
Thermometer Symbol 11, 45
Time Format, Setting the 40
Troubleshooting 53-54

Unit of Measurement
Milligrams per Deciliter (mg/dL) 11-12, 56
Millimoles per Liter (mmol/L) 11-12, 56
Setting the 41

Water Loss, Excessive 3
Weight 56

Downloaded from www.Manualslib.com manuals search engine

Time of Day	Plasma glucose range (mg/dL) for people without diabetes	Your target range (mg/dL)	
Fasting and before meal	Less than 110	_____	mg/dL
2 hours after meals	Less than 140	_____	mg/dL
Bedtime	Not specified	_____	mg/dL
Between 2AM and 4AM	Not specified	_____	mg/dL

Source: ADA Clinical Practice Recommendations 2003

Meter Serial No. ( ) – ( ) _____ –_____
(Found on the back of your meter)

Software Version No. _____

Important phone numbers:

Customer Care: Toll Free 1-888-522-5226
(24-hours a day, 7-days a week)

_____ Physician

_____ Pharmacist

_____ Diabetes Educator

_____ Other

Downloaded from www.Manualslib.com manuals search engine

Abbott Diabetes Care Inc.
1360 South Loop Road
Alameda, CA 94502

www.AbbottDiabetesCare.com

Call Customer Care
Toll Free at 1-888-522-5226

Covered by one or more of the following U.S. Patents:
D424,696 and D426,638 and 6,071,391 and 6,120,676 and 6,143,164 and 6,299,757 and 6,338,790 and 6,071,391 and 6,120,676 and 6,143,164 and 6,299,757 and 6,338,790 and 6,461,496 and 6,503,381 and 6,591,125 and 6,592,745 and 6,616,819 and 6,618,934 and 6,676,816 and 6,749,740 and 6,893,545.

© 2005 Abbott Printed in U.S.A.

ART03992 Rev B 10/05

Downloaded from www.Manualslib.com manuals search engine